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stator

magnetically permeable, electric field confining insulating covering surrounding the conductor; [and a rotor,] said stator core including stator teeth extending radially inwards, towards said rotor configured as a number of tooth sections jointed axially forming a stator tooth plank, a number of said stator tooth planks being fit together side by side forming a section of a stator core up to a complete stator core, such that when an electric field is generated said field is enclosed within the winding for at least one turn thereof.

Claim 2. (Twice Amended) [A] The stator according to claim 1, wherein a number of said sections are joined together in order to form a complete stator core.

Claim 3. (Twice Amended) A stator according to claim 1, wherein stator teeth have radially positioned semicircular recesses and the teeth are disposed with the recesses in confronting relationship forming circular axial openings for threadably receiving the cable therein, said winding comprises at least one current-carrying conductor, a first layer having semiconducting properties surrounding said conductor, a solid insulating layer surrounding said first layer, and a second layer having semiconducting properties surrounding said insulating layer.

Claim 4. (Twice Amended) [A] The stator according to claim 3, wherein the [stator winding] cable comprises a high voltage cable.

Claim 5. (Twice Amended) [A] The stator according to claim [3]1,
wherein the cable is flexible.

Claim 6. (Twice Amended) [A] The stator according to claim [3]1,
wherein at least one of said first layer and said second layer forms an
equipotential surface surrounding said conductor.

Claim 7. (Twice Amended) [A] The stator according to claim [3]1,
wherein said second layer is connectable to a predetermined potential.

Claim 8. (Twice Amended) [A] The stator according to claim 7, wherein
said predetermined potential is ground potential.

Claim 9. (Twice Amended) [A] The stator according to claim [3]1,
wherein at least two adjacent layers have substantially equal thermal expansion
coefficients.

Claim 10. (Twice Amended) [A] The stator according to claim [3]1,
wherein each of said three layers is solidly connected to the adjacent layer along
substantially the whole of a connecting surface therebetween.

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Claim 11. (Twice Amended) [A] The stator according to claim [3]1, wherein said layers adhere to one another where the cable is subjected to a bending force.

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Claim 12. (Twice Amended) [A] The stator according to claim 1, wherein the [stator winding] cable is threadably insertable into the aligned circular openings between each stator tooth plank before said planks are fit together.

Claim 13. (Twice Amended) [A] The stator according to claim 1, wherein the stator tooth comprises a forward tooth portion facing inwards, towards the rotor, when mounted in the stator, and a yoke portion facing outwards, each stator tooth having opposite lateral sides each confronting a corresponding side of an adjacent stator tooth, said confronting lateral sides together forming a slot for receiving the winding and a lining disposed on at least one of the lateral sides, the lining being formed of a resilient material.

Claim 14. (Twice Amended) [A] The stator according to claim 1, wherein the stator tooth comprises a forward tooth portion facing inwards, towards the rotor, when mounted in the stator and a yoke portion facing outwards, each stator tooth having a pair of opposite lateral sides each lateral side facing a corresponding side of an adjacent stator tooth, the facing lateral sides of the adjacent stator teeth forming slots for receiving the winding, and further

comprising a separate lining element of a resilient material located between the facing lateral sides of the yoke portions of adjacent stator teeth.

Claim 15. (Twice Amended) [A] The stator according to claim 1, wherein each stator tooth has at least one longitudinal axial notch along its innermost side facing the rotor, and a key element of a non magnetic material is positioned in said notch to prevent lateral oscillations of said tooth.

Claim 16. (Twice Amended) [A] The stator according to claim 15, further including a lining located in the notch formed of a resilient material.

Claim 17. (Twice Amended) [A] The stator according to claim 1, further comprising compressing means for tangentially compressing the teeth for providing a prestressing at the innermost end of the teeth.

Claim 18. (Twice Amended) [A] The stator according to claim 17, wherein the compressing means includes a stator frame.

Claim 19. (Twice Amended) [A] The stator according to claim 1, further comprising an annular stator frame surrounding the core for securing the stator core sections of the complete stator core in place.

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Claim 20. (Twice Amended) [A] The stator according to claim 18, wherein the tooth has an outer yoke portion, and further including a stator frame, and a lining of a resilient material located on the external side of the yoke portion of said tooth, in contact with the stator frame.

Claim 21 has been canceled.

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Claim 22. (Twice Amended) [A] The stator according to claim 20, wherein the stator frame has at least one longitudinal axial opening and said stator frame includes at least one tightening means for tightening said frame around the stator core by reducing said opening.

Claim 23. (Twice Amended) [A] The stator according to claim 20, wherein the stator frame is divided into at least two frame sections, such that a longitudinal axial opening is formed between the frame sections, and further including means for connecting the frame sections and for tightening said frame around the stator core for reducing said openings.

Claim 24. (Twice Amended) [A] The stator according to claim 23, wherein said means for tightening the stator frame includes a bolted joint operating against the resilient material of the linings.

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Claim 25. (Twice Amended) [A] The stator according to claim 24,
wherein the stator frame further includes [a] spring means associated with said
tightening means, that the openings in the stator frame and the winding slots are
automatically adjusted to thermal expansions and contractions of the winding.

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Claim 26. (Twice Amended) [A] The stator according to claim 25,
wherein the spring means includes a cup spring.

Claim 27. (Twice Amended) [A] The stator according to claim 17,
wherein the compressing means includes a structure of prestressing means,
arranged along the circumference of the core, including brackets arranged axially
for distributing the compressive force to the core.

Claim 28. (Twice Amended) [A] The stator according to claim 27,
wherein the compressing means includes rods or wires.

Claim 29. (Twice Amended) [A] The stator according to claim 28,
wherein the each tooth has a yoke portion including an external side and the stator
has a yoke for engaging the external side of the yoke portions of the teeth along a
contact surface therebetween, and friction means is located at the contact surface.

Claim 30. (Twice Amended) [A] The stator according to claim 17, wherein the compressing means includes at least one clamping ring applied circumferentially around the stator core.

Claim 31. (Twice Amended) [A] The stator according to claim 27, further comprising a base upon which the core is supported.

Claim 32. (Twice Amended) [A] The stator according to claim 13, wherein the resilient material is rubber.

Claim 33. (Twice Amended) [A] The stator according to claim 1, wherein each tooth section includes guiding means on both lateral sides; said guiding means for engaging in mating relation with corresponding guiding means on the adjacent stator tooth.

Claim 34. (Twice Amended) A method for manufacturing a stator for a high voltage rotating electric machine having a stator, with a stator core, a winding and a rotor, wherein said stator core has stator teeth extending radially inwards, towards said rotor comprising the steps of:

axially joining a number of tooth sections into a stator tooth plank for forming said stator tooth

fitting, side by side, a number of stator tooth planks, for forming at least one section of the stator core, and

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providing a winding within which a generated electric field [is enclosed]
confining the electric field in the winding for at least one turn of said winding.

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Claim 35. (Twice Amended) [A] The method according to claim 34,
further comprising joining together a number of sections of the stator core to form
a complete stator core.

Claim 36. (Twice Amended) [A] The method according to claim 34,
[comprising of] wherein providing a winding comprises providing [comprising] a
magnetically permeable high voltage electric field confining cable.

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Claim 37. (Twice Amended) [A] The method according to claim 34,
comprising the steps of

- a) removably locating an initial fixture element, including at least one of a
stator tooth plank and a fixture tooth in a manufacturing fixture
- b) removably inserting at least one temporary stator tooth in the fixture
- c) inserting a stator winding on the temporary stator tooth situated closest
to the fixture element
- d) removing the temporary stator tooth situated closest to the fixture
element from the manufacturing fixture, and allowing the stator winding placed
on the temporary stator tooth to fall or be pressed down into a correct position in a
first winding slot in the fixture element

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e) inserting a stator tooth into the manufacturing fixture and fitting the stator tooth over the stator winding

f) repeating steps a) through e) until at least a section of a complete stator core has been produced.

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Claim 38. (Twice Amended) [A] The method according to claim 37 comprising after step d), gluing a yoke portion of each stator tooth plank to a corresponding yoke portion of a previously fitted stator tooth plank.

Claim 39. (Twice Amended) [A] The method according to claim 37 comprising, gluing each stator tooth plank to a previously fitted tooth plank at a corresponding yoke position after a section of a complete stator core has been manufactured.

Claim 40. (Twice Amended) [A] The method according to claim 37, comprising rotating the fixture about a horizontal axis corresponding to an axis of symmetry of the stator.

Claim 41. (Twice Amended) [A] The method according to claim 37, comprising joining the stator windings to define an intended number of poles and phases.

Claim 42. (Twice Amended) [A] The method according to claim 34, wherein the stator teeth have lateral side and yoke portion comprising providing a lining of resilient material to the yoke portion of at least one of two opposite lateral sides of a stator tooth facing the corresponding side of an adjacent stator tooth.

Claim 43. (Twice Amended) [A] The method according to claim 42, comprising inserting a lining element of resilient material between the lateral sides of the yoke portions of two adjacent stator teeth.

Claim 44. (Twice Amended) [A] The method according to claim 34, comprising forming notches at a forward end of the stator tooth planks and inserting key elements of a non magnetic material between the tooth planks, in the notches.

Claim 45. (Twice Amended) [A] The method according to claim 44, comprising of providing a lining of a resilient material inside the notch.

Claim 46. (Twice Amended) [A] The method according to claim 34, comprising applying compression means for tangentially compressing the teeth of the stator, thereby providing a prestressing at the innermost end of the teeth.

Claim 47. (Twice Amended) [A] The method according to claim 34, wherein the teeth each have an yoke portion and with an external side comprising providing a lining of a resilient material to the external side of the yoke portion of the stator tooth.

Claim 48. (Twice Amended) [A] The method according to claim 47, wherein the stator has a frame with an inwardly facing surface comprising providing a lining of a resilient material to the inwardly facing surface of the stator frame, which enters into contact with the external sides of the yoke portions of the stator teeth.

Claim 49. (Twice Amended) [A] The method according to claim 34, comprising assembling the stator core sections into a complete stator core within a stator frame.

Claim 50. (Twice Amended) [A] The method according to claim 49, wherein adjacent stator planks from slots having walls comprising surrounding the stator core with resilient material, and tightening the stator frame for compressing the resilient material so that the winding is pressed against the walls of the slots.

Claim 51. (Twice Amended) [A] The method according to claim 34, wherein the teeth each have a yoke portion with an external side and the stator has

a yoke engaging the external side at a contact surface, comprising providing a friction means at the contact surface between the external side of the yoke portions of the teeth and the stator yoke portion arranged circumferentially along said external side of the yoke portions.

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Claim 52. (Twice Amended) [A] The method according to claim 46, comprising fitting the core sections together under compression by comprising prestressing the core about the circumference and distributing the compressive force to the core.

Claim 53. (Twice Amended) [A] The method according to claim 46, comprising fitting the core sections together under compression by means of applying at least one clamping ring circumferentially around the core.

Claim 54. (Twice Amended) [A] The method according to claim 34, comprising inserting the winding in the axial direction of the stator core.

Claim 55. (Twice Amended) [A] The method according to claim 34, comprising manufacturing the stator on the site of installation of the rotating electric machine.

Claim 56. (Twice Amended) [A] The stator for a rotating electric machine, manufactured in accordance with the method in claim 34.

Claim 57 has been canceled.

Please add the following new claims:

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~~--Claim 58. The stator of claim 1, wherein the recesses comprise semicircular surfaces formed in the teeth, and the axial openings are in the form of circular holes for threadably receiving the cable therein.~~

Claim 59. The stator of claim 3, wherein the second layer is outermost of the cable for contacting the stator core.

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~~Claim 60. The method of claim 34, wherein forming the radially adjacent recesses comprises forming semicircular recesses and wherein fitting the two planks together forms radially adjacent circular openings for threadably receiving the cable therein.~~

Claim 61. The method of claim 34, wherein providing the winding comprises forming a cable having a conductor, forming a first semiconducting layer surrounding the conductor and being in electrical contact therewith, forming a layer of solid insulation surrounding the first layer, and forming an outermost layer of semiconducting material surrounding the insulation layer for contacting the stator core.